

From: Roy Seneca/R3/USEPA/US
Sent: 3/1/2012 4:16:40 PM
To: David Polish/R3/USEPA/US@EPA
CC:
Subject: Fw: WOUB-TV (Athens, Ohio) Feb. 28: Researchers Investigate Links Between Fracking And Water Contamination

Roy Seneca
EPA Region 3 Press Officer
Office of Public Affairs
seneca.roy@epa.gov
(215) 814-5567

----- Forwarded by Roy Seneca/R3/USEPA/US on 03/01/2012 04:16 PM -----

From: Roy Seneca/R3/USEPA/US
To: Shawn Garvin/R3/USEPA/US@EPA, William Early/R3/USEPA/US, Daniel Ryan/R3/USEPA/US@EPA, Michael DAndrea/R3/USEPA/US@EPA, Michael Kulik/R3/USEPA/US@EPA, Terri-A White/R3/USEPA/US@EPA, Jennie Saxe/R3/USEPA/US@EPA, Stacie Driscoll/R3/USEPA/US@EPA, Joan Schafer/R3/USEPA/US@EPA, Ron Borsellino/R3/USEPA/US@EPA, Kathy Hodgkiss/R3/USEPA/US@EPA, Dennis Carney/R3/USEPA/US@EPA, Gerald Heston/R3/USEPA/US@EPA, Ann DiDonato/R3/USEPA/US@EPA, Trish Taylor/R3/USEPA/US, Helen Duteau/R3/USEPA/US@EPA, Cecil Rodrigues/R3/USEPA/US@EPA, Heather Gray/R3/USEPA/US@EPA, Humane Zia/R3/USEPA/US@EPA, JohnJ Butler/R3/USEPA/US@EPA, capacasa.jon@epa.gov, Victoria Binetti/R3/USEPA/US@EPA, KarenD Johnson/R3/USEPA/US@EPA, David Sternberg/R3/USEPA/US@EPA, Richard Rupert/ESC/R3/USEPA/US, Betsaida Alcantara/DC/USEPA/US@EPA, David Bloomgren/DC/USEPA/US@EPA, Brendan Gilfillan/DC/USEPA/US@EPA
Date: 03/01/2012 03:54 PM
Subject: WOUB-TV (Athens, Ohio) Feb. 28: Researchers Investigate Links Between Fracking And Water Contamination

Video Link: <http://woub.org/2012/02/28/researchers-investigate-links-between-fracking-and-water-contamination>

Researchers Investigate Links Between Fracking And Water Contamination

By
Taylor Mirfendereski

Published Tue, Feb 28, 2012 4:14 pm Dateline
Bainbridge, OH

On the morning of December 15, 2007, Thelma and Richard Payne were jolted from their bed by surprise.

"Things were crashing all over the place and it sounded like somebody was out there in the other room pulling out drawers and just letting them drop, and I thought, 'Somebody's out there ransacking our house.'"

But it wasn't a thief that caused the commotion.

"I got out of bed and looked and I saw of these things happening. The floor parting, the ceiling cracking, the side walls cracking, and hearing all of this stuff falling," said Richard.

Their Bainbridge, Ohio home of 51 years had exploded and shifted on its foundation.

Across the street on the same morning, Ruth Cooper woke up to an unusual sight in her garage.

"When we opened up the garage door, there's this water up in the air, six feet in the air like a fountain," she said.

That water was coming from her well. The Ohio Department of Natural Resources determined that highly pressurized methane had entered their aquifer. Ohio Valley Energy was held accountable for improperly constructing and monitoring a vertical well at the end of the road.

"They could have reacted better initially when they were drilling their well and cementing their well and when they noticed some pressure issues inside their casing," said ODNR Deputy Chief Thomas Tugend.

For two years after the blast, Cooper and more than 20 of her neighbors in Bainbridge were not able to drink or cook with water from their faucet. But for washing clothes, taking showers, and cleaning the house, Cooper's well water was a necessity.

"You just hoped that when you took your shower, that it wasn't black at that time," she said.

In 2010, the state reacted to the Bainbridge incident with Ohio Senate Bill 165. It lays out guidelines for the construction of wells, the hydraulic fracturing process and more. Ohio State Representative David Hall co-sponsored the bill. He's a Republican representing the 97th House District, and says the new guidelines will prevent future accidents from happening.

"We just don't put a piece of casing down in a well through your water table and say that's your only protection. Now we telescope pipes in between that pipes and in between the pipes, we actually cement. So we have a, uh, we have a backup," Hall said.

The state says what happened in Bainbridge was a one time problem -- but in the small city of Dimock, Pennsylvania, water contamination has plagued their town. It's been at the center of a national debate over gas drilling and the extraction technique known as hydraulic fracturing. It's a process where millions of gallons of sand, water, and chemicals are blasted deep into the earth. This shatters underground shale and frees natural gas for collection.

For Ron and Jean Carter, this process has hit home. In 2009, Cabot Oil & Gas drilled a well about 300 feet from their front porch. It was after they started drilling that Jean became concerned.

"I noticed the water had an odor to it. Put a little in a glass, tasted it, and I thought, 'Uh oh. We have a problem,'" she said.

The Carters say they had their water tested multiple times and were told it was not safe to drink.

"You couldn't see anything. You could not tell, my, our water was crystal clear but it's deadly," Jean said.

"We didn't know what the chemicals in the water could do to us. And we still have fear of what is going to happen down the road," Ron added.

Cabot denies responsibility for water contamination in the county.

"We don't think that our actions impacted our water. We don't think our actions are causing the concerns they are claiming there," said George Stark, director of external affairs at Cabot Oil & Gas.

The Carters are one of four families in Dimock which are now receiving daily water deliveries on behalf of the U.S. Environmental Protection Agency.

The decision to deliver water was announced at the end of last month. The EPA said in a statement: "We are providing water to a handful of households because data developed by Cabot itself provides evidence that they are being exposed to hazardous substances at levels of health concern."

The EPA collected water samples from 57 homes in Dimock and intends to collect about a dozen more. Officials say they expect to have validated results next week.

"We are glad that the EPA stepped in because we couldn't get anywhere," said Ron.

But not everyone is pleased -- particularly Cabot Oil and Gas.

"I don't believe that the testing it again is necessary. I think there has been ample testing that has taken place and I think it is not a good use of the resources to do additional testing," Stark said.

Cabot Oil & Gas has accused the EPA of selectively choosing data on substances it was concerned about in order to reach a result it had predetermined.

In response to that, the EPA issued a statement: "We have been clear and forthright about the basis of our actions and acknowledged that uncertainties about the data made available to the agency existed. We acknowledge that the data available to us was incomplete and of uncertain quality, and based on this, determined the need to conduct sampling of wells."

The Pennsylvania Department of Environmental Protection is also unhappy with EPA's decision to step in.

"There's no question that EPA is overstepping. DEP regulates these facilities and always has and EPA has never before shown this degree of involvement," said Pennsylvania DEP spokesperson Katy Gresh.

Across the street from Ron and Jean Carter, their son Dusty is not receiving replacement water from the EPA.

"They said they have to do years of testing. Well, in years of testing, where am I? I'm still here, it's been two years now that my water's been bad," Dusty said.

He fills up jugs of water from a nearby spring, but he is still exposed to the potentially harmful water on a daily basis.

"We bathe as quick as we can. You have to bathe," said Dusty. "You know, I have to bathe. I refuse not to. I just can't go someplace else to bathe every day. Water is what I need."

In neighboring Bradford County, Max Chilson, 80, has had contaminated water since May.

"I came in and cooked my dinner and went back out, looked at the washing machine, and it was jet black," Chilson said.

His house is surrounded by well pads. He says multiple people have tested his water. Results from a test in August conducted by Fairway Laboratories showed high levels of sodium, strontium, manganese, barium, and fuel diesel. The same test found so many chloroforms in his water that they deemed it "not fit for human consumption."

He showed us a jar of his water that contains black solids.

Chilson has not been hooked up to replacement water, but receives five gallon jugs from an energy company that is drilling near his home.

"If you have to carry water in the house and heat it on the stove like grandma did, carry it in your bath tub, and heat all of your water on the stove for dishes, well that sure is called impact. I wish everybody could get a little taste of that," Chilson said.

Bradford County resident Sherry Vargson gets a taste of it too. When she draws a glass of water, it's fizzy and cloudy. But that's not all.

"There's some sort of cocktail in there that my water doesn't freeze," Vargson said.

She's also got so much methane in her water that when she runs a match under the faucet, the water erupts with fire.

The source of the contaminated water is highly debated among scientists, environmentalists and the oil and gas industry.

Executive Vice President of the Ohio Oil and Gas Association Tom Stewart says the contaminants migrated into the water long before drilling ever took place.

"You can go up and down eastern Ohio and you can light faucets from water wells all day long. That's because you find naturally occurring, natural gas," Stewart said.

Others debate about whether hydraulic fracturing is the cause for the contamination. A University of Texas study published earlier this month found no link between hydraulic fracturing and water contamination.

"We found no evidence that there had been any pollution of groundwater from the hydraulic process itself. On the other hand, there are other parts of shale gas development that can lead to fluids getting into groundwater supplies," said Charles "Chip" Groat, the lead researcher on the study.

One Duke University researcher suspects that poor well construction is the cause of contamination.

"The biggest question is, is there any direct link from hydraulic fracking underground? We don't know that. We don't know the precise mechanisms, but we're following that. But I'd start with poor well construction," said Rob Jackson. He's a professor of environmental studies at Duke University.

In December, the EPA released a draft report of its ground water investigation in Pavillion, Wyoming. The report suggests that compounds found in the aquifer could have been associated with hydraulic fracturing. The study is now undergoing a peer review, but it's the first sign that fracking and water contamination could be linked.

"The question has gotten down into some pretty interesting and sometimes nasty debates over whether those chemicals were introduced by the EPA when they drilled their well or whether they came from the fracturing fluids because some of those constituents are not present in the fracturing fluids," Groat said.

Researchers say the most difficult part of coming to a conclusion is a lack of baseline testing from before the drilling began. While Cabot Oil and Gas says it pre-tested before drilling new wells in Dimock, it says it would have taken a different approach.

"The biggest thing we would have done differently with the knowledge we have today is we would have tested for preexisting, naturally occurring methane," Stark said.

Back in Ohio, one state lawmaker introduced a bill that would put a moratorium on fracking until a federal study by the EPA about its impacts on drinking water resources is complete. It's not expected to be concluded until 2014.

"Given the experience in other states, I don't think it's unreasonable to say that we should be cautious as we move forward with fracking," said Ohio State Representative Denise Driehaus. Driehaus is a Democrat and represents the 31st House District.

Rep. Hall, who is also the chair of the Agriculture and Natural Resources Committee says he will not move the Driehaus' bill forward.

"Anything to deal with the federal government, there's always delays and I feel in our code and with the experts we've talked to, that we are ready for this process," he said.

As nationwide studies continue to investigate whether or not shale gas development is a cause for public concern, Thelma and Richard Payne are just thankful for the surviving.

"That bothered me as much as anything the first year, why are we here? I haven't figured that out for sure yet, but I'm still here trying to figure it out," Thelma said.

Roy Seneca
EPA Region 3 Press Officer
Office of Public Affairs
seneca.roy@epa.gov
(215) 814-5567